

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

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The outstanding feature of the weather during September was the tropical hurricane that prevailed during the second decade of the month. This storm may be classed as one of the most severe on record and is fully described elsewhere in the REVIEW. A map of the track is also shown and Charts VIII to XV, which cover the period from the 11th to the 19th, give an idea of the extent and intensity of the hurricane, as well as of the conditions which prevailed over the northern portion of the ocean.

The number of days with gales was considerably above the normal over the eastern section of the steamer lanes, as they were reported on 6 days in the squares between 45° to 50° N., and 20° to 30° W. West of the 40th meridian, gales of extra-tropical origin occurred on from 1 to 3 days.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian). * North Atlantic Ocean, September, 1928

Stations	Average pressure	Departure ¹	High-est	Date	Low-est	Date
	Inches	Inch (°)	Inches		Inches	
Julianeab, Greenland.....	29.73		30.36	27th.....	29.16	1st.
Belle Isle, Newfoundland.....	29.88	-0.02	30.14	20th.....	29.64	29th.
Halifax, Nova Scotia.....	30.07	+0.06	30.50	20th.....	29.76	22d.
Nantucket.....	30.05	+0.01	30.36	6th.....	29.70	26th.
Hatteras.....	30.01	-0.02	30.20	5th ²	29.30	19th.
Key West.....	29.93	-0.04	30.10	1st.....	29.58	17th.
New Orleans.....	29.98	-0.01	30.10	9th.....	29.82	18th.
Cape Gracias, Nicaragua.....	29.84	-0.04	29.94	1st.....	29.76	16th. ³
Turks Island.....	30.02	+0.05	30.10	1st ⁴	29.86	14th. ⁴
Bermuda.....	30.14	+0.09	30.34	6th.....	29.84	23d.
Horta, Azores.....	30.10	-0.06	30.44	9th.....	29.58	25th.
Lerwick, Shetland Islands.....	29.97	+0.13	30.34	15th.....	29.72	6th.
Valencia, Ireland.....	30.08	+0.09	30.48	15th.....	29.54	28th.
London.....	30.12	+0.12	30.35	15th.....	29.61	28th.

¹ From normals shown on Hydrographic Office Pilot Chart, based on observations at Greenwich mean noon, 7 a. m., seventy-fifth meridian.

² No normal available.

³ On other dates.

⁴ Probably lower on 15th, which is missing.

The number of days with fog was apparently above normal along the New England coast, about normal over the middle sections of the steamer lanes, and somewhat below over the Grand Banks and off the European coast. From the 2d until the 5th a tropical disturbance of moderate intensity moved slowly westward over the Caribbean Sea. The American S. S. *San Benito* on the evening of the 4th ran into a severe squall off Cape San Antonio, accompanied by heavy rain and suddenly shifting winds of a maximum force of 8, though the barometer readings varied but little during the night. The American S. S. *Norma*, in 20° 30' N., 81° 07' W., near midnight of the 3d, encountered a heavy ESE. to SE. squall of force 8 to 10, with a rough cross sea.

On the 5th a Low was central about 10 degrees east of Belle Isle that afterwards developed into by far the most severe storm of the month in northern waters. On the

6th the steamer lanes between the fifteenth and forty-fifth meridians were swept by heavy gales, with a maximum force of 12, as shown by storm reports in table from the American S. S. *Tulsa*. By the 7th this disturbance had decreased considerably both in intensity and extent, although on that date moderate to strong gales were encountered between the twenty-fifth meridian and the Irish coast.

On the evening of the 9th a moderate depression was central near 27° N., 51° W., that moved slowly north accompanied by moderate winds until the morning of the 11th. By that date this Low was near 40° N., 45° W., and had deepened considerably, with winds of force 7 near the center at the time of observation.

Chart VIII, for the 12th, shows the position of the tropical hurricane on that date and also that of the northern disturbance, just referred to, central near 43° N., 37° W. The latter Low moved steadily northward and, as shown on Chart XII, was by the 16th near the coast of Iceland.

From the 17th to 19th conditions over the steamer lanes were comparatively quiet, but by the 20th a well-developed Low of limited extent was central near 47° N., 40° W., accompanied by moderate northwesterly gales. On the 21st and 22d the center of this Low was from 300 to 500 miles north of the Azores, and on both of these dates moderate gales were reported by vessels in the vicinity of these islands as well as in the eastern sections of the steamer lanes.

From the 22d to the 24th a depression was over the western portion of the Gulf of Mexico, although up to the time of writing no vessel reports have been received indicating a wind force higher than 6 in that region.

From the 24th to 30th moderate to strong gales were reported from the steamer lanes east of the thirtieth meridian, although the storm area varied considerably from day to day, reaching its greatest intensity on the 28th and 29th.

From the 25th to 29th there was also a comparatively slight disturbance in the vicinity of Newfoundland and Nova Scotia, with a maximum wind force of 9 at Belle Isle on the 26th.

Note.—American S. S. *Stanley*, Capt. C. H. Longbottom; observer, J. P. Hays. From Port Said to New York.

September 17, 12.50 p. m., ship's time. In 39° 25' N., 63° 25' W., a whirlpool about 500 feet in diameter passed vessel about 1 mile to the northward. Whirlpool was traveling to the eastward at about 20 knots and was churning up the water and sending up a column to a height of about 40 feet. Whirlpool seemed to be caused by an eddy of wind coming from a low dark nimbus cloud directly above it, with which it seemed to keep pace. It did not appear to be a waterspout in process of formation, as nothing but a fine spray was carried into the air. Barometer 30.12 inches. Dry-bulb, 91°, wet, 82°, water 80°.